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August 25, 1992

TO:

Environmental Quality Council, Capitol Building, Helena, MT 59620
Director's Office, Dept. of Health & Environmental Sciences
Director's Office, Dept. of Fish, Wildlife & Parks
Parks Division, Montana Dept. of Fish, Wildlife & Parks
  1420 E. 6th Avenue, Helena, MT 59620
Fisheries Division, Montana Dept. of Fish, Wildlife & Parks
  1420 E. 6th Avenue, Helena, MT 59620
Wildlife Division, Montana Dept. of Fish, Wildlife & Parks
  1420 E. 6th Avenue, Helena, MT 59620
State Historic Preservation Office, Montana Historical Society
Montana State Library
Board of County Commissioners, Yellowstone County Courthouse,
  Billings, MT 59101
Yellowstone County Sanitarians Office, Yellowstone County
  Courthouse, Billings, MT 59101
Jim Jensen, Montana Environmental Information Center,
  P. O. Box 1184, Helena, MT 59624
Janet Ellis, Montana Audubon Council, P. O. Box 924
  Helena, MT 59624

Ladies and Gentlemen:

The enclosed Environmental Assessment (EA) has been prepared for installation of improvements at Lake Elmo State Park in Yellowstone County, and is submitted for your consideration. Questions and comments will be accepted until **September 25, 1992**. If you have questions, feel free to contact Ken Oravsky at 252-4654 or myself at 444-3750. All comments may be sent to Montana Dept. of Fish, Wildlife & Parks, 2300 Lake Elmo Drive, Billings, MT 59105.

Sincerely,

Doug

DOUG MONGER
Asst. Administrator
Parks Division

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ENVIRONMENTAL ASSESSMENT - Lake Elmo State Park Development

Project Name: Lake Elmo State Park Development

Location: Lake Elmo State Park, located at northeast edge of Billings, in Yellowstone County, MT. The park contains 59 acres of land, and 64 acres of water.

Planning Documents Used: Lake Elmo State Park Master Site Plan, approved in 1987, and revised in 1990.

Individuals having Input into Management Plan Process:

- Paul Valle, Landscape Architect, FWP, Helena
- Ray Berntsen, Regional Parks Manager, FWP
- Jerry Walker, Lake Elmo Manager, 1984-91, FWP
- Ken Oravsky, Park Operations Supervisor, FWP
- Sue Dalbey, Lake Elmo Manager, FWP
- Roger Fliger, Regional Supervisor, FWP
- Bob Lund, BLM
- Mike Hink, Billings Parks, Recreation, and Public Lands

Groups Having Input into Management Plan Process:

- Lake Elmo Community Park Association
- Yellowstone Valley Audubon Chapter
- Billings Rod and Gun Club
- Southeast Sportsmen Association
- Breakfast Exchange Club
- Montana State Parks Foundation
- Bassbusters

Regional FWP Reviewers of this Environmental Assessment:

- Ray Berntsen, Acting Regional Supervisor
- Charles Eustace, Regional Wildlife Manager
- Jim Darling, Regional Fisheries Manager
- Jim Hansen, Regional Waterfowl Biologist
- Dennis Hagenston, Warden Captain
- Bill Pryor, Regional Information Officer

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Development Planned:

PHASE I: Construction of most urgently needed visitor facilities (estimated completion - April 1993):

- **Restroom building** - The flush toilets will be housed in a frame building approximately 400 square feet in size, and will be located near center of beach area at north shore of lake.
- **Pump station** - This station will be used to pump effluent from the restroom building into existing municipal sanitary sewer system. The frame building of approximately 100 square feet will be located at the northeast corner of park.

- Utilities - Underground utilities will be installed (electric, water, sewer, and telephone service) to supply the above buildings.
- Entrance relocation - The main park entrance will be relocated from the northeast corner of the park to the northwest corner to improve traffic flow in the park, provide safer ingress and egress through improved sight distances, and to segregate vehicle and pedestrian traffic within the park. The new entrance will connect with Rolling Hills Road, opposite Lariat Drive. The existing entrance will be obliterated, replanted with grass, and the existing fence will be continued across at that point. The new entrance road will be 24 feet wide, and will conform to all traffic standards. All irrigation and drainage ditches will be kept operational, using culverts as needed. The surface of the road will initially be gravel, which will be upgraded to asphalt in a later phase as funding becomes available. The existing entrance station will be relocated to the new entrance.
- Parking Development - The informal parking area that currently exists near the beach area for approximately 300 cars will be relocated to a level area about 300 feet north of its present location in order to align with the new entrance road. This parking area will be built as a fenced area with no surface improvement under this phase. It will be blacktopped, striped, and curbed to provide formal parking for 370 cars at a later phase. Curbing or barriers will restrict off-road vehicle use along with signage as needed.
- Erosion Control/ Surface Reclamation - The existing informal parking area is currently on a slope which leads downhill toward the beach. Vegetation cannot establish on this slope due to heavy use. Once the parking area is relocated, turf will be established on this slope, which will enhance aesthetics and reduce erosion.

Notes:
1) A wood chip walking/jogging trail around the lake is currently under construction as a Montana Conservation Corps Project. Because of the time frame involved, a separate environmental assessment was written for that project, and is included as an addendum to this assessment.
2) Most of Phase I will be completed by contractor. Other phases, or parts thereof, may be completed by contractor, in house, by volunteer or service organizations, or by Montana Conservation Corps, depending on funding and community interests. Projects may also be moved between phases depending on these same factors. Regardless of the method of construction or timing, Montana Department of Fish, Wildlife & Parks design and construction standards will be employed in all construction.

PHASE II: Development of visitor facilities of lesser urgency, and/or those facilities of primary importance for which funding still needs to be procured (estimated completion - Spring of 1995):

- Planting of Trees, other landscape plants, and irrigation system development - Trees will be planted as per master site plan to provide shade, block some wind, enhance aesthetics, and enhance nesting habitat. Native species will be used wherever possible. Plantings will be reviewed by FWP landscape architects.

  FWP currently owns 30 shares of Billings Bench Water Association, which will allow the irrigation of 30 acres of the park. An irrigation system will be installed which will use lake water or ditch water to irrigate trees, turf and landscape plantings in the main development area. This volume of water would have little effect on the lake level as it currently fluctuates up to approximately two vertical feet according to the Association's irrigation needs.

- Handicapped Accessible Fishing Pier - A fishing pier meeting all accessibility standards will be built near the existing FWP region 5 headquarters. The pier will be built on wood or steel pilings driven into the lake bottom, and will have wooden substructure and decking. It will be approximately 40 feet long, and 20 feet wide at its widest point.

- Concession Building, Courtesy Dock and Sailboard Prep Area- A frame building, approximately 400 square feet, which will replace the existing temporary concession structures. This building will provide facilities for food preparation, storage of items for sale, and serve as an office for the concessionaire. Water, sewer, electric, and telephone utilities will also be extended as part of this project.

- Large Picnic Shelter - This shelter, designed to serve 150 to 200 people, will be built in the northeast corner of the park. It will be an open design, and will be constructed of wood timbers with a concrete floor. The only utilities provided to this building will be drinking water.

- Boat Ramp Renovation - The existing boat ramp will be removed and replaced with a textured concrete ramp approximately 20 feet wide, and extending adequately underwater for safe boat launching. It is the responsibility of the consultant overseeing construction to obtain any Corps of Engineer permits if needed.

- Handicapped Accessible Trail with 7 fishing nodes - This trail will follow a path completely around the lake, running right next to the wood chip trail in many places. It will have an asphalt surface 6 feet wide, and will conform to all accessibility standards. Fishing nodes will be blacktopped and have appropriate curbing. These will be placed at locations around the lake that offer suitable water depth for fishing.

- Beach/ Swimming Area Renovation - Protruding rock will be removed, slope reduced and sand added to widen the beach.

PHASE III: Development of final visitor facilities that will require capitol funding and environmental review (estimated completion - Spring of 1997):

- Small group Use Shelter - A shelter serving approximately 75 people will be constructed in the southeast corner of the park. It will have an open design, and will be constructed of wood timbers with a concrete floor. A gravel entrance road approximately 24 feet wide will be built to connect with Sharon Drive. A gravel parking lot for approximately 30 cars will be built. Drinking water (from Yellowstone County Water District of Billings Heights) will be the only utility provided at this location. A gate will be placed at the entrance to this area, and it will be opened for reserved group use only, which will minimize disturbance to this area of the park. Portable toilets will be rented for this facility during the summer season.

- Nature Trail - This trail will be approximately 3 feet wide, which will depart the wood chip trail at the southernmost edge of the lake, and rejoin it about 1/2 mile later along the west shore of the lake. This trail will traverse the cattail swamps in the southwest end of the park consisting of boardwalk placed on wooden pilings and mowed pathway. Interpretive signs along the way will key to an interpretive guide. It is anticipated that a Corps of Engineers permit may be needed for this project and will be procured before proceeding.

- Volleyball Courts - Two to three tournament size sand volleyball courts will be located near the picnic shelter in the northeast corner of the park.

- Horseshoe Pits - Two horseshoe pits will be located near the picnic shelter in the northeast corner of the park.

- Informal Recreation Fields and Parking - An area approximately 400 feet by 600 feet will be established in the northwest corner of the park to allow enough room for informal softball, football, soccer, frisbee, etc. games. A gravel spur road 24 feet wide off the main entrance road will allow access to this area. There will also be a gravel parking lot for about 30 cars. Soil in this area will be graded and reseeded to establish turf. Slope is generally less than 2% and use of fertilizer limited, therefore runoff into lake will be minimal. Utility development will consist only of drinking water. Portable restrooms will be provided. Lawn maintenance in this area will be limited to mowing, and no lighting will be provided.

- **Administrative Building** - A frame building of approximately 400 square feet will be built near the beach area to provide office and lunch room space for park staff. Water, sewer, electric, and telephone utilities will be extended underground to serve this building.
- **Entrance Building** - A frame building of approximately 40 square feet will be built along the new entrance road for a fee collector, cash register, information and brochures, etc. Electric and telephone utilities will be extended underground to serve this building. (Until this building is constructed, the existing 4 foot by 7 foot frame structure will continue to be used for this purpose.)

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POTENTIAL IMPACT ON THE PHYSICAL ENVIRONMENT

ITEM	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	REMARK
1. Terrestrial & aquatic life and habitats		X				see comment #1
2. Water Quality, quantity & distribution			X			see comment #2
3. Geology & soil quality				X		
4. Vegetation cover, quantity & quality			X			see comment #1
5. Aesthetics			X			see comment #3
6. Air Quality				X		
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resource of land, water, air & energy				X		
9. Historical & archaeological sites				X		see comment #4

COMMENTS

PHYSICAL ENVIRONMENT

1. The land area of Lake Elmo State Park is composed of mostly open field and shrubs, with some areas of Russian Olive growing around the southern lake shore, and some cattail swamps located in the southwestern end of the park. This man-made habitat was plowed and cleared as recently as 15 years ago. Historically not a marsh area, the swamps are created by seepage from the Billings Bench Water Association irrigation ditch and would cease to exist should the ditch be lined. Whitetail dear and various bird species not indigenous to the area have moved in as the habitat develops. All areas of the park have been disturbed by recreational and other human and domestic animal use over the past 90 years. The lake itself is an irrigation reservoir, built in the early 1900's, and is still used today by the Billings Bench Water Association.

The majority of development will be confined to the northern end of the park, at which 95% of all recreational use takes place today. Development of the remainder of the park will be very limited under this plan. This is as per the requests of many groups, neighbors, and concerned citizens that commented on the Lake Elmo State Park Master Site plan at various open houses held in 1989 and 1990.

Any possible increased runoff from paving and building construction will be controlled at time of construction by installation of temporary barriers, and afterward by appropriate referral of drainage. The most valuable upland wildlife habitat in the park is at the southern end, which will see little development.

This plan calls for no alteration of the lake itself, and for limited development along the southern portions of the lake shore which provides waterfowl nesting areas and whitetail deer habitat. If it is determined that the nature trail would have too large of an impact on whitetail deer habitat the trail could be omitted from the plan. Gasoline motors will continue to be prohibited except during the courtesy boat testing period held on weekends in May. The suitability of the lake for use by migratory waterfowl should therefore be unchanged.

2. The relocation of the existing informal beach parking area, and establishment of turf on this slope will greatly reduce erosion from this slope into the lake. This will enhance water quality. Water quantity will remain under the influence of the Billings Bench Water Association.

3. Currently much of the north shore of the lake is in a disturbed state. Visitor use, particularly vehicular use is relatively uncontrolled. This results in generally poor aesthetics in much of this area at present. Existing buildings are mostly temporary structures, and match no particular style. Currently, there are a few trees at the northern part of the park, and the cottonwoods that do exist have no hope of regeneration with current vehicular use patterns.

Under this project, vehicular use will be better controlled and limited to an area about one-third of what it is now. Tree planting, landscape and turf development, plus irrigation development in these areas will greatly enhance aesthetics.

Concurrently, the southern end of the park, which has an excellent diversity of vegetation, including Russian Olive, shrubs, and cattail swamps, will be relatively undisturbed.

4. A cultural resources inventory was performed for this site by Steven Allberg in 1985/1986. This report, presented in January, 1986, indicated "No evidence of cultural sites." S.H.P.O. concurred with the report in February, 1986.

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POTENTIAL IMPACT ON THE HUMAN ENVIRONMENT

ITEM	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	REMARK
1. Social structures and mores				X		
2. Cultural uniqueness & diversity				X		
3. Local and state tax base and tax revenue			X			see comment #5
4. Agricultural or industrial production				X		
5. Human Health				X		
6. Access to quality of recreational & wilderness activities			X			see comment #6
7. Quantity and distribution of employment			X			see comment #7
8. Distribution of population			X			see comment #8
9. Demands for governmental services			X			see comment #9
10. Industrial and commercial activity				X		
11. Locally adopted environmental plans and goals			X			see comment #10

COMMENTS

HUMAN ENVIRONMENT

5. Various groups and individuals, including local realtors and the Montana Tradeport Authority have agreed that recreational development as planned at Lake Elmo State Park will have several beneficial effects on the local tax base and the local economy. These include increased local property values, and increased tourism potential.

6. Many groups contacted indicated that access to quality water-based recreation is limited in the greater Billings area. This development plan will provide increased recreational opportunities for a broad segment of the population, including youth, adults, families, elderly people, and physically challenged people.

7. Development at Lake Elmo State Park is expected to provide an increase of 2 to 5 seasonal FWP positions, including demands for maintenance and additional demands for fisheries enhancement, plus 1 to 2 seasonal concession positions. There will also be a moderate increase in FWP expenditures for goods and services as operations increase. Actual construction of facilities will result in $183,000 to $1 million in construction expenditures, depending on the means of construction used.

8. Planned development will distribute the visiting public in a safer and more orderly manner. Signage, trails, formal parking, and proper roadway widths will direct and separate vehicular and pedestrian traffic within developed areas, reducing impact on the undeveloped areas of the park.

9. Demands for governmental services will include minor needs for drinking water, electricity, and sewer, which can be accommodated by the existing municipal infrastructure. The additional facilities will require 2 to 4 additional seasonal positions once fully completed, plus addition security and sanitation services valued at a total of $18,000 to $24,000 per year. It is anticipated that the resulting increase in user fees collected once the park is completed will fund these increased operational costs.

10. Lake Elmo State Park recreational development fits in well with locally adopted environmental goals and plans. Various community groups are represented on Lake Elmo Community Park Association. These people have expressed the communities recreational needs, which have been incorporated in the plan. The wood chip trail will tie in with trails planned outside the park. Neighbors, and the Yellowstone Valley Audubon Society have commented that the southern end of the lake should be kept as undisturbed as possible since it provides excellent habitat for nesting and migratory birds, as well as habitat for small mammals and whitetail deer. This is also included in the plan. This plan also addresses the regional need for lifeguard supervised lake water swimming, which exists nowhere else in this region.

Alternatives: Various development alternatives were presented to the public at open houses conducted as part of the management plan development process. These alternatives ranged from extensive recreational development of nearly 100% of the land area in the park, to absolute minimal development.

We feel that the current plan has the support of FWP staff, as well as neighbors, local organizations, and park visitors.

Persons Preparing This Environmental Assessment:
- Ken Oravsky, Park Operations Supervisor, FWP
- Sue Dalbey, Lake Elmo Manager, FWP

Need for an Environmental Impact Statement: As per Section 12.2.431 (2), an E.I.S. is not required since there are no impacts that will have significant adverse effects.

> "If none of the adverse effects of the impact are significant, an E.I.S. is not required."

The only three areas where possible adverse impacts are identified are "Terrestrial & Aquatic Life and Habitats," "Vegetation Cover, Quantity and Quality," and "Demands for governmental services."

The impacts in each of these areas is considered to be insignificant as indicated by a minor or moderate level of impact and explained in the comments.

All other impacts of the project are beneficial.